

PRELIMINARY DETERMINATION ON PERMIT APPLICATION

Date of Mailing: October 29, 2019

Name of Applicant: Express Pipeline, LLC – Buffalo Terminal

Source: Crude Oil Terminal

<u>Proposed Action</u>: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 5121-02.

Proposed Conditions: See attached.

<u>Public Comment</u>: Any member of the public desiring to comment must submit such comments in writing to the Air Quality Bureau (Bureau) of the Department at the address in the footer of this cover letter. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by November 13, 2019. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

<u>Departmental Action</u>: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the Bureau's office in Helena. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

<u>Procedures for Appeal</u>: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Julie A. Merkel Permitting Services Section Supervisor

Julio A Merkel

Air Quality Bureau (406) 444-3626

JM:EW Enclosure Ed Warner

Gd Warner

Lead Engineer – Permitting Services Section Air Quality Bureau

(406) 444-2467

MONTANA AIR QUALITY PERMIT

Issued To: Express Pipeline, LLC MAQP: #5121-02

Buffalo Terminal Application Complete: 9/20/2019

411 Landmark Kr. Suite 200 Preliminary Determination Issued: 10/29/2019

Casper, Wyoming 82609 Department's Decision Issued:

Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Express Pipeline LLC (Express Pipeline) for the Buffalo Terminal, pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, et seq., as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

The physical address of the Buffalo Terminal is 691 West Dry Creek Road, Buffalo, Montana 59418. The legal address is the NW¹/₄ of the SW¹/₄ of Section 7, Township 12 North, Range 16 East, in Fergus County, Montana. The map coordinates are 46.8152 latitude, -109.7668 longitude.

B. Current Permit Action

On September 20, 2019, the Montana Department of Environmental Quality – Air Quality Bureau (Department) received a permit modification application from Express Pipeline. Express Pipeline is proposing an expansion of the crude oil pipeline such that the throughput capacity at the Buffalo Terminal would increase from 280,000 barrels per day (bbl/day) to 342,800 bbl/day. This expansion would require installation of piping and utilities that would increase fugitive emissions throughout the facility. Increased throughput would also result in an increase in tank emissions, although physical changes to the existing storage tanks would not be required. In addition to the proposed throughput capacity expansion and associated emissions increases, floating roof landing and tank cleaning emissions associated with the ten tanks on site have been added to the emissions inventory.

Section II: Conditions and Limitations

A. Emission Limitations

- 1. Express Pipeline shall install and operate all crude oil tanks with a mechanical shoe seal, meeting the requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60 Subpart Kb, plus a secondary seal (ARM 17.8.752).
- 2. Express Pipeline shall not operate, or have on-site, more than one (1) liquid propane generator engine. The maximum rated capacity of the engine shall not exceed 153 horsepower, and shall be certified to meet applicable EPA emissions standards. The engine shall be used only for emergency use and required maintenance/safety checks (ARM 17.8.749).

5121-02 1 PD: 10/29/2019

- 3. Express Pipeline shall comply with all applicable standards, testing, monitoring, reporting, and recordkeeping requirements of 40 CFR 60 Subpart Kb (ARM 17.8.340 and 40 CFR 60 Subpart Kb).
- 4. Express Pipeline shall institute a Leak Detection and Repair (LDAR) program for leaks from valves, flanges, pump seals, connectors, and similar components which are within the boundaries of this station and are readily viewable. The LDAR program shall consist of the following (ARM 17.8.752):
 - a. Express Pipeline shall monitor for leaks no less than quarterly, with at least 30 calendar days separating monitoring events for any component.
 - b. Express Pipeline may utilize leak detection methods incorporating sight, sound, smell, or Method 21 testing. In the case of Method 21 testing, an instrument reading of 10,000 parts per million or greater is considered a leak.
 - c. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided below:
 - (1) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a shutdown which poses unworkable safety or significant economic impact. Repair shall occur before the end of the next shutdown. Monitoring to verify the repair must occur within 15 days after startup of the process unit.
 - (2) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in service.
 - (3) Delay of repair for valves and connectors will be allowed if:
 - (i) Express Pipeline demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - (ii) When the repair is made, the purged material is collected and destroyed or recovered
 - d. Express Pipeline shall record the inspections. Such records shall include date of inspection, description of area inspected if the entire facility is not inspected, leak detection methodology utilized, results of the inspection, dates that repairs are made, and documentation supporting any delay of repair exception made.
 - e. Express Pipeline shall provide an annual report summarizing the leak detection monitoring records which shall include dates of inspection, detection methods utilized, the number of leakers found, the dates of

- equipment repair or repair status, and supporting information for any delay of repair exception made. The information shall be submitted with the annual emissions inventory.
- f. Express Pipeline shall estimate actual emissions from fugitive leaks in the annual emissions inventory. Such emissions estimation shall utilize methodologies as outlined in the Draft August 2014 Version 3 of the Emissions Estimation Protocol for Petroleum Refineries, or subsequent versions, or other methods as may be approved by the Department.
- 5. Express Pipeline shall comply with all applicable standards, testing, monitoring, recordkeeping, and reporting requirements of 40 CFR 60 Subpart Kb (ARM 17.8.340 and 40 CFR 60 Subpart Kb).
- 6. Express Pipeline shall comply with all applicable requirements of 40 CFR 60 Subpart JJJJ (ARM 17.8.340 and 40 CFR 60 Subpart JJJJ).
- 7. Express Pipeline shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ (ARM 17.8.342 and 40 CFR 63 Subpart ZZZZ).

B. Testing Requirements

- 1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 2. The Department may require further testing (ARM 17.8.105).

C. Reporting Requirements

- 1. Express Pipeline shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 2. Express Pipeline shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by Express Pipeline as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

Section III: General Conditions

- A. Inspection Express Pipeline shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring Systems (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Express Pipeline fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Express Pipeline of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Express Pipeline may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit Analysis Express Pipeline LLC – Buffalo Terminal MAQP #5121-02

I. Introduction/Process Description

The Express Pipeline LLC (Express Pipeline) - Buffalo Terminal is a crude oil breakout station with a total tank capacity of 1,400,000 barrels (bbl). The Express Pipeline is a 24" crude oil pipeline that transports up to 342,800 barrels (bbl) of oil per day of unrefined crude oil from Hardisty, Alberta to Casper, Wyoming with delivery points at Buffalo and Edgar, Montana.

A. Permitted Equipment

This station consists of the following:

• Crude Oil Storage Tanks

•	Tank BT-201:	120,000 bbl Internal Floating Roof Tank
•	Tank BT-202:	120,000 bbl Internal Floating Roof Tank
•	Tank BT-203:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-204:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-205:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-206:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-207:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-208:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-209:	150,000 bbl Internal Floating Roof Tank
•	Tank BT-210:	150,000 bbl Internal Floating Roof Tank

- Fugitive Emissions from valves, drains, flanges, pump seals, etc.
- Emergency Generator Set with maximum rated horsepower of the engine driving the generator no more than 153 horsepower.

B. Source Description

The Express Pipeline is a 24" crude oil pipeline that transports up to 342,800 barrels of oil per day (bbl/day) of unrefined crude oil from Hardisty, Alberta to Casper, Wyoming with delivery points at Buffalo and Edgar, Montana. This Montana Air Quality Permit (MAQP) is for the Buffalo Terminal, which consists of the equipment described in Section I.A. The physical address of the Buffalo Terminal is 691 West Dry Creek Road, Buffalo, Montana 59418. The legal address is the NW½ of the SW¼ of Section 7, Township 12 North, Range 16 East, in Fergus County, Montana. The map coordinates are 46.8152 latitude, -109.7668 longitude.

5121-02 1 PD: 10/29/2019

C. Permit History

On April 10, 2015, the Department received from Express Pipeline LLC a complete application for the Buffalo Terminal. **MAQP #5121-00** was issued Final May 15, 2015.

On May 2, 2018, the Department received from Express Pipeline an administrative amendment request. This permit action corrected errors related to the fuel used by the generator engine. The original permit assumed diesel; however, the generator is fired using propane as indicated in the permit application. This permit action updated Section II.A.2 and II.A.6 to recognize propane as the fuel and 40 CFR 60 Subpart JJJJ as the applicable requirement. **MAQP #5121-01** replaced MAQP #5121-00.

D. Current Permit Action

On September 20, 2019, the Department received a permit modification application from Express Pipeline. Express Pipeline is proposing an expansion of the crude oil pipeline such that the throughput at the Buffalo Terminal would increase from 280,000 barrels per day (bbl/day) to 342,800 bbl/day. This expansion would require installation of piping and utilities that would increase fugitive emissions throughout the facility. Increased throughput would also result in an increase in tank emissions, although physical changes to the existing storage tanks would not be required. In addition to the proposed throughput capacity expansion and associated emissions increases, floating roof landing and tank cleaning emissions associated with the ten tanks on site have been added to the emissions inventory. Reference to an emission standard tier was removed from the propane backup generator condition because it was not relevant to stationary propane engines. **MAQP #5121-02** replaces MAQP #5121-01.

E. Response to Public Comments

Person/Group Permit Commenting Reference		Comment	Department Response	

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - Express Pipeline shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
 - 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
 - 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Express Pipeline must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Express Pipeline shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 - 5. ARM 17.8.316 Incinerators. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used. Further, no person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes.
 - 6. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 - 7. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
 - 8. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Express Pipeline is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

5121-02 4 PD: 10/29/2019

- a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
- b. 40 CFR 60, Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This subpart applies to all the crude oil tanks at the Buffalo Terminal.
- c. 40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines: This subpart applies to the emergency generator engine at this station.
- 9. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories. Express Pipeline is considered an affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to a as listed below:
 - b. 40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

This subpart applies to the emergency generator engine at this station.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Express Pipeline submitted the appropriate permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Express Pipeline has a PTE greater than 25 tons per year of Volatile Organic Compounds (VOC); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Express Pipeline submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Express Pipeline submitted an affidavit of publication of public notice for the September 28, 2019 issue of the Lewistown News-Argus, a newspaper of general circulation in the Town of Lewistown in Fergus County, as proof of compliance with the public notice requirements.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 - 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 - 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

- 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Express Pipeline of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- 15. <u>ARM 17.8.770 Additional Requirements for Incinerators</u>. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5121-02 for Express Pipeline, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to NSPS (40 CFR 60 Subparts A, Kb, and JJJ).
 - e. This facility is subject to current NESHAP (40 CFR Subparts A and ZZZZ).
 - f. This source is not a Title IV affected source, or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Express Pipeline will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Express Pipeline will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. Express Pipeline shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

Emissions from valves, flanges, connectors, pump seals, and other similar components:

The proposed expansion of the Line 40 pipeline capacity would require the installation of additional piping and utilities at Buffalo Terminal that would increase fugitive emissions throughout the facility. Fugitive equipment leaks are unintentional VOC leaks from equipment components including, but not limited to, valves, flanges and other connections, pumps, pressure relief devices, process drains, and open-ended valves. They arise due to normal wear and tear, improper or incomplete assembly of components, inadequate material specification, manufacturing defects, damage during installation or use, corrosion, fouling, and environmental effects (e.g., vibrations and thermal cycling). The potential for such emissions depends on a variety of factors including the type, style, and quality of components, type of service (gas/vapor, light liquid or heavy liquid), age of component, frequency of use, maintenance history, and process demands.

Essentially all equipment components may leak gases to some extent. However, only a small percentage of the equipment components have any measurable leakage, and of those only a small percentage are the source of most of the emissions.

The Department is not aware of, to date, the prescription of certain design standards for specifying required equipment component design or pipeline design through BACT. Further, such an approach would not substitute need for inspection of these components to verify a non-leak status. For these types of emissions, work practice standards are appropriate, when such work practice standard diligently monitors for and promptly corrects equipment leaks.

Consistent with the existing requirements at Buffalo Terminal, the additional piping and utilities associated with the expansion project would be incorporated into the leak detection and repair (LDAR) program which allows for leak detection methods incorporating sight, sound, or smell; as well as Method 21 testing if Express Pipeline would so choose. The requirements closely resemble the requirements of 40 CFR 60 Subpart VVa for heavy liquids, however, 40 CFR 60 Subpart VVa is not applicable to this source.

Crude Oil Storage Tanks

The increased crude oil throughput at the facility would result in an increase in VOC emissions from the existing storage tanks; however, no physical changes to the tanks are required as part of the project. Because there would be no physical change or change in operation of these tanks, they are not considered modified and are not subject to BACT review for this action. Existing BACT requirements for the tanks would remain in place.

The additional emissions associated with floating roof landing and tank cleaning that are considered routine maintenance are not subject to review.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emissions standards.

IV. Emissions Inventory

Express Pipeline MAQP #5121-02 Potential to Emit

Source	Emissions in Tons Per Year				
	VOC	NO_X	CO	$PM/PM_{10}/PM_{2.5}$	SO_2
BT-201	2.92				
BT-202	3.07				
BT-203	3.91				
BT-204	3.86				
BT-205	3.33				
BT-206	3.33				
BT-207	3.33				
BT-208	3.33				
BT-209	3.84				
BT-210	3.33				
Floating Roof					
Landings and	39.25				
Cleanings					
Emergency	0.08	0.17	0.34	Negligible	Negligible
Generator	0.00	0.17	0.54	regugible	TACSHRIPIE
Fugitive VOC	0.76				
Leaks	0.70				
TOTAL:	74.35	0.17	0.34	Negligible	Negligible

^{*} Detailed emissions calculations are on file with the MAQP #5121-02 application. EPA's TANKS emissions estimation program version 4.0.9d was utilized due to the extensive amount of variables and calculations involved.

V. Existing Air Quality

The area in which the Buffalo Terminal is located is deemed attainment/unclassifiable for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined, based on the limited allowable emissions from this facility, that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting
		private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal
		of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate
		state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the
		property?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact,
		investment-backed expectations, character of government action)
	XX	7. Does the action damage the property by causing some physical disturbance with respect to the
		property in excess of that sustained by the public generally?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or
		flooded?
	XX	7c. Has government action lowered property values by more than 30% and necessitated the physical
		taking of adjacent property or property across a public way from the property in question?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in
		response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c;
		or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Air, Energy & Mining Division Air Quality Bureau P.O. Box 200901, Helena, Montana 59620 (406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Express Pipeline, LLC – Buffalo Terminal 411 Landmark Kr. Suite 200 Casper, Wyoming 82609

Montana Air Quality Permit number (MAQP): 5121-02

EA Draft: 10/29/2019

EA Final:
Permit Final:

- 1. Legal Description of Site: The physical address of the Express Pipeline, LLC Buffalo Terminal is 691 West Dry Creek Road, Buffalo, Montana 59418. The legal address is the NW½ of the SW¼ of Section 7, Township 12 North, Range 16 East, in Fergus County, Montana. The map coordinates are 46.8152 latitude, -109.7668 longitude.
- 2. *Description of Project:* The installation of additional piping and utilities at the facility to accommodate an increase in maximum potential throughput as a result of an expansion of pipeline capacity.
- 3. Objectives of Project: To process more crude oil through the facility.
- 4. Alternatives Considered: In addition to the proposed action, the Department of Environmental Quality (Department) also considered the "no-action" alternative. The "no-action" alternative would deny the issuance of the air quality permit to reflect the increased emission levels from the proposed project. However, the Department does not consider the "no-action" alternative to be appropriate because Express Pipeline demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5121-02.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

5121-02 1 PD: 10/29/2019

7. SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The proposed action would result in an increase in maximum potential emission levels; however, there would be relatively little construction for new piping and utilities and no planned new ground disturbance. Any impacts to terrestrial and aquatic life and habitats would be minor.

B. Water Quality, Quantity and Distribution

Water quality would be protected by implementation of the appropriate stormwater pollution prevention plan and other water permits. No more than minor impacts to water quality, quantity, and distribution would be expected.

C. Geology and Soil Quality, Stability and Moisture

No more than minor impacts to geology and soil quality, stability, and moisture would be expected due to no new ground disturbance associated with the project. The facility would remain a minor source of air emissions by regulatory standards.

D. Vegetation Cover, Quantity, and Quality

No more than minor impacts to vegetation cover, quantity, and quality would be expected due to no new ground disturbance associated with the project. The facility would remain a minor source of air emissions by regulatory standards.

E. Aesthetics

No more than minor impacts to aesthetics would be expected due to no new ground disturbance or new emitting units associated with the project.

F. Air Quality

The project results in an increase in maximum potential emission levels from the facility based on an increase in maximum potential crude oil throughput through the facility. MAQP #5121-02 contains requirements derived from rules and programs designed to protect air quality. The facility would remain a minor source of air emissions by regulatory standards. No more than minor impacts to air quality would be expected.

G. Unique Endangered, Fragile, or Limited Environmental Resources

During initial permit issuance, the Department contacted the Montana Natural Heritage Program with a file request for any known species of special concern in the project area. In checking the database for this area, no records of species of special concern were noted. As noted in section A, minor impacts would be expected to terrestrials. As noted in Sections B, D, and F, no more than minor impacts to water quality, vegetation, or air quality would be expected. Impacts to any unique, endangered, fragile, or limited environmental resources would be expected to be minor.

H. Sage Grouse Executive Order

The Department recognizes that the site location is not within a Greater Sage Grouse General Habitat Area as defined by Executive Order No. 12-2015.

I. Demands on Environmental Resource of Water, Air and Energy

As noted in Sections B and F, impacts to water and air quality would be expected to be minor. There would be some utility upgrades including electrical power and control systems to support new equipment, meters, and valve heat trace systems. Overall the impacts are not expected to be more than minor.

J. Historical and Archaeological Sites

During initial permit issuance, the Department contacted the Montana Historical Society to request a cultural resource file search for the project area. Some limited cultural resource inventories have been conducted in the area, with no previously recorded sites noted. The Department would expect that impacts to historical or archaeological sites would be expected to be minor, if any at all.

K. Cumulative and Secondary Impacts

The Department found no more than minor impacts to the individual physical and biological considerations above. Any cumulative and secondary impacts are expected to be minor.

8. SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The facility currently employs five people with no increase in personnel expected as a result of this project. No impacts would be expected to social structures and mores.

B. Cultural Uniqueness and Diversity

The facility currently employs five people with no increase in personnel expected as a result of this project. No impacts would be expected to cultural uniqueness and diversity.

C. Local and State Tax Base and Tax Revenue

The facility would not increase the number of personnel as a result of this project and therefore it would not have an associated impact on local tax base and revenue. There could be minor impacts to local tax revenue due to increased product throughput.

D. Agricultural or Industrial Production

There are no planned new land disturbances as a result of the issuance of MAQP #5121-02; therefore, there would be no expected impact to agricultural production. The increase in pipeline capacity represents a minor impact to industrial production.

E. Human Health

MAQP #5121-02 would contain limitations and conditions derived from rules and programs designed to protect public health. Minor impacts to human health would be expected.

F. Access to and Quality of Recreational and Wilderness Activities

The project would not impact any recreational opportunities and have no discernable impact on access and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

The facility currently employs five people with no increase in personnel expected as a result of this project. Therefore, there are no impacts to the quantity and distribution of employment as a result of issuing MAQP #5121-02.

H. Distribution of Population

The facility would not increase the number of personnel as a result of this project; therefore, there are no impacts to the distribution of population.

I. Demands for Government Services

This project would require the issuance of MAQP #5121-02 and associated compliance activities; however, these impacts to demand for government services are minor.

J. Industrial and Commercial Activity

The temporary construction activities and increase in potential product throughput would have no more than a minor impact on industrial and commercial activity.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing MAQP #5121-02.

L. Cumulative and Secondary Impacts

The Department found no more than minor impacts to the individual economic and social considerations reviewed above. No more than minor cumulative and secondary impacts would be expected.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is to update the permit to reflect an increase in throughput capacity and associated maximum potential emission levels due to an increase in pipeline capacity. MAQP #5121-02 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Ed Warner Date: October 10, 2019